

COMBINED DISTRICT COUNCILS,
GUISBOROUGH UNION.

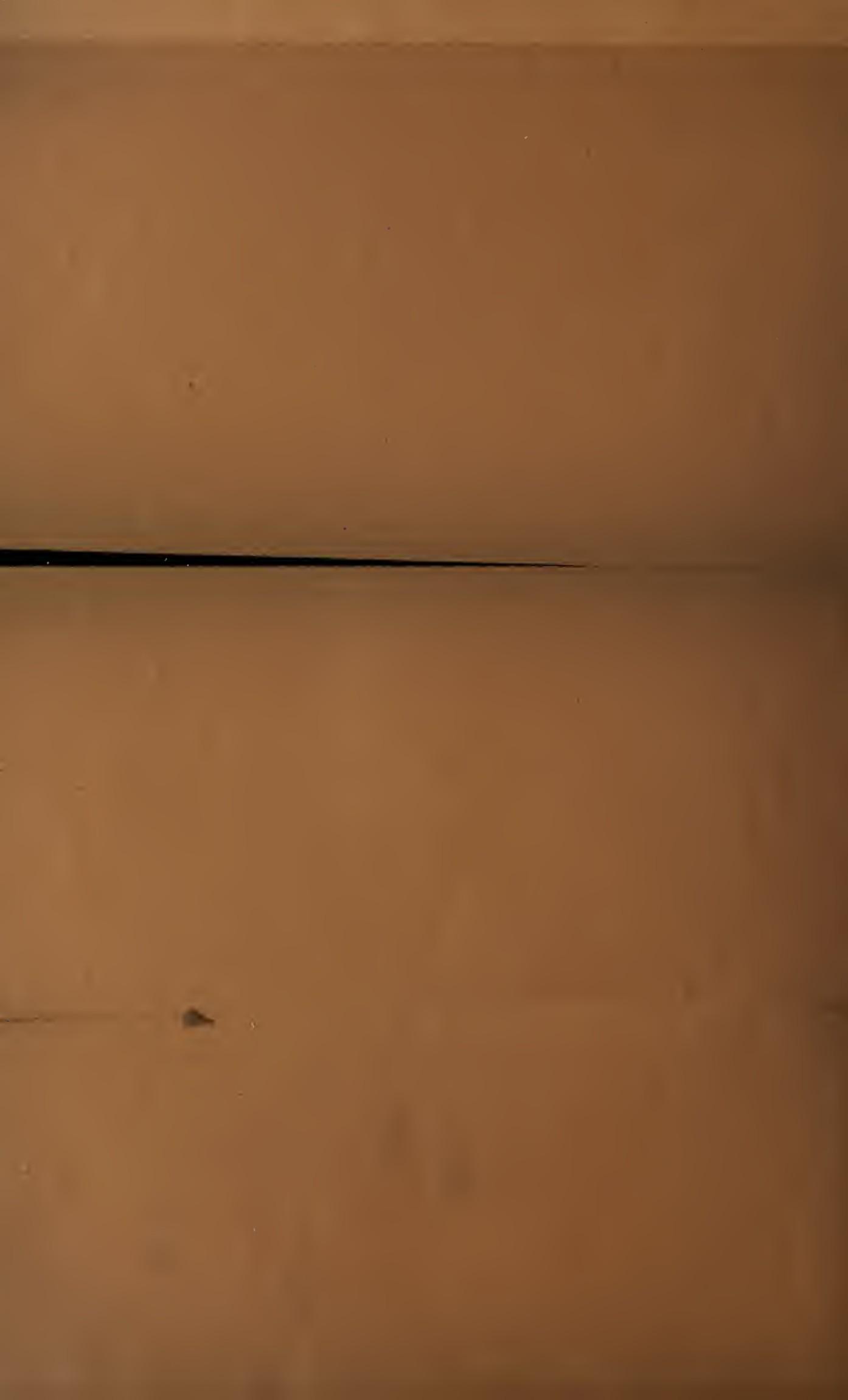
报告

FOR THE YEAR 1906,

OF THE

MEDICAL OFFICER OF HEALTH,

W. W. STAINTHORPE, M.D., C.M., D.P.H.



TO THE CHAIRMAN AND MEMBERS

OF THE

GUISBOROUGH RURAL DISTRICT COUNCIL.					
GUISBOROUGH URBAN			"	"	"
LOFTUS	"	"	"	"	"
REDCAR	"	"	"	"	"
SALTBURN	"	"	"	"	"
SKELTON & BROTTON			"	"	"

GENTLEMEN,

I have pleasure in submitting for your consideration my report for the year ending December 31st, 1906.

Birth and Death Rates.

The births registered during the year numbered 1,420 (683 males, 737 females); birth rate 29·33. The average birth rate during the ten years 1896—1905 was 30·35. The number of deaths was 712 (390 males, 322 females); death rate 14·70. The death rate from diarrhoeal diseases was 0·86; that from infectious diseases 0·49. The deaths among infants under 12 months of age numbered 201. The infantile mortality rate per 1,000 legitimate births was 137·1; per 1,000 illegitimate it was 220·7.

Smallpox.

In none of the districts was any case of smallpox notified.

Scarlet Fever.

The following Table shows the number of cases reported during each quarter of the year :-

District.	1st Quarter	2nd Quarter.	3rd Quarter.	4th Quarter.	Totals.	Number of Houses Infected.
Guisborough Rural	... 21	12	7	3	43	25
Guisborough Urban	... 12	8	0	6	26	23
Loftus	... 5	5	8	4	22	20
Redcar	... 8	8	15	16	42	30
Saltburn	... 5	0	7	1	13	10
Skelton & Brotton Urban	11	12	8	3	34	29

In no district did the fever prevail in epidemic form. A few small and limited outbreaks occurred apparently due to the attendance at day or Sunday school of children suffering from a very mild attack of the disease.

The attack rate, per 1000 births registered, during the fifteen years that have elapsed since the adoption of the Notification Act, in the several districts is :—

Guisborough urban	... 240	Redcar urban	... ... 155.
Guisborough rural	... 133.	Saltburn urban	... ... 102.
Loftus urban	... 197.	Skelton and Brotton urban	235.

The variation in the attack rate is due largely to variation in local conditions. In an urban district where the bulk of the population is of one class, engaged in the same industry, having many things in common, there is much more communication between families than in a rural district where there is not the same opportunity of frequent visits, or in an urban district with a mixed population. It will be readily understood that in the first-named class of district the spread of fever due to the visits of neighbours to infected houses or of the infected to neighbours' houses will be greater than in the other named districts. Another factor in the rate

variation is house accommodation. In very few of the dwellings of the industrial classes is it possible to carry out such isolation as is requisite to check the spread of infection. A third factor influencing the variation in the attack rate is the extent to which the residents of a town are open to receive infection either by contact with infected persons outside the district or by contact with such persons coming into it. The very large number of persons living in Redcar whose place of business is outside its area and the still larger number who visit it in the season renders this town specially susceptible to the contraction of infectious diseases. Compare such a place with a village some distance from a railway station and the variation in the attack rate from scarlet fever and other similar infectious diseases is easily appreciated.

Puerperal Fever.

No case of this fever was reported during the Year

Disinfection.

Efficient disinfection of rooms, clothing, etc. after the recovery of patients who have suffered from scarlet fever and diphtheria is very difficult and in some instances impossible. Under ordinary circumstances the transmission of the matières morbi from the patient's bedroom to other rooms in the house is unavoidable. Disinfection of every room in a house would necessitate the family being transferred to another house whilst the work was carried out.

In none of the districts is there any disinfecting apparatus.

Some time ago I suggested to the County Education Authority that the routine of school cleansing should include disinfection of school rooms at least twice in the year. I understand that the Education Committee considered the matter but, so far as I am aware, took no definite action thereon.

Diphtheria and Membranous Croup.

The following Table shows the number of cases notified during each quarter of the year:—

District.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Number of Houses Infected.
Guisborough Rural ...	3	5	3	3	10
Guisborough Urban ...	0	0	0	0	0
Loftus Urban ...	0	1	1	0	2
Redcar Urban ...	3	13	21	5	36
Saltburn Urban ...	2	0	2	0	4
Skelton and Brotton ...	0	4	4	1	9

Of the 42 in the Redcar district two only ended fatally whilst of the 29 in the other districts seven were fatal. This great disproportion in the case mortality I am not able to account for.

During the 15 years which have elapsed since the adoption of the Notification Act the diphtheria attack rate *per 1000 births registered* in the several districts was as follows:—

Guisborough rural	34.
Guisborough urban	20.
Loftus urban ...	12.
Redcar urban ...	27.
Saltburn urban ...	26.
Skelton & Brotton urban	38.

It will be noted that the attack rate in the Loftus district is low. I can offer no theory for this comparative immunity. Possibly the period of 15 years, is too short to permit of a true comparison between district and district.

Enteric Fever.

Five cases of this fever were reported, viz.—three in the Guisborough Rural district, and one each in the Skelton and Brotton and the Redcar Urban. One of those in the first named district was imported. This number is the lowest notified in any one year since the adoption of the the Notification Act. It is equally satisfactory to be able to record that not a single death from enteric fever occurred during the year. This is the first time during my tenure of office, over 24 years, that in compiling an annual report I have been in the position to make such a statement.

Diarrhoeal Diseases.

Under this head in addition to deaths from "diarrhoea" those arising from enteritis, gastritis, and gastro-enteritis *in infants under one year of age* are included. Of the fourty-four deaths due to diarrhoeal diseases thirty-eight occurred in infants under twelve months. Of the total number 23 occurred in the month of September.

There is reason to believe that the greater or less prevalence of autumnal or seasonal diarrhoea depends upon meteorological conditions. It is however essentially a filth disease. It is probable that flies act as carriers of organisms which give rise directly or indirectly to diarrhoea. Feeding on organic matter undergoing decomposition they then alight on food in the kitchen or larder and so pollute it. It is in the autumn principally that flies invade dwellings. Last year only three deaths were certified as arising from diarrhoea, flies were less abundant than usual; this year more abundant.

To reduce the mortality due to this disease, cleanliness of air, of water, of food, and of soil are absolutely essential. Every possible step should be taken to this end. One of the most necessary requirements is an improvement in closet and refuse receptacles. The capacity of all such receptacles should be reduced to the minimum so as to necessitate frequent scavenging. There is much need for improvement in the construction of pan-closets. These are too often arranged in such a way as to unavoidably lead to the pollution of the pan space. In another part of this report I have alluded to the necessity of greater attention being paid by builders to the position of pantries.

Isolation Hospital Accommodation.

A Joint Committee, consisting of members of the Redcar and Saltburn Urban Councils and of Councillors representing the parishes of Kirkleatham, Marske, Upleatham, and Wilton, had under consideration the provision of a joint infectious diseases hospital. A suitable site was provisionally obtained. Plans and estimates of a hospital consisting of an administration block, scarlet fever and diphtheria blocks, &c., were laid before the Committee. These were approved of and forwarded to the individual Councils for their consideration. At a special meeting of the Redcar Council held on December 18th, it was resolved by 5 votes to 4 not to proceed with the scheme. At the same meeting a Committee was appointed to consider and report upon (1) such improvements as would render the present sanatorium (a cottage) more efficient,—(2) the provision of a new hospital to serve the district of Redcar alone. The Sanitary Committee of the Redcar Council recommended at a meeting held on Dec. 27th, that the Medical Officer report on the cost, etc. of the erection of a hospital (joint) on the proposed site, constructed of iron and wood.

Tubercular Diseases.

Thirty-five deaths were certified as due to phthisis and thirty-three to other forms of tuberculosis. The death rate from tubercular diseases during the five years 1902-1906, per 1,000 of the population, in the several districts was:—

Guisborough rural ...	1·50.	Redcar urban ...	... ...	1·06.
Guisborough urban ...	0·90.	Saltburn urban ...	... ...	1·21.
Loftus urban ...	1·14.	Skelton & Brotton urban ...		1·71.

The difference between the rate in the Guisborough urban district [and that in the Skelton and Brotton is to be accounted for to a large extent by the greater proportion of young persons in the latter district as compared with the former. In the five years, 1902-1906, the deaths of persons over 65 years of age was in the Guisborough urban 32·1 per cent. of the whole number, whilst in the Skelton & Brotton it was only 17·7; this shows that in the former the proportion of old persons living therein is much greater than in the latter. As tuberculosis affects the young chiefly it will be readily understood that a higher death rate from it is to be expected in districts in which there is a comparatively large proportion of young people.

In considering what can be done to check the ravages of tuberculosis the chief differences between this and other forms of infective diseases must be taken into account. The former is chronic, the latter acute. The susceptibility of the individual is less in the former than in the latter, in other words a larger number of those who come in contact directly or indirectly with persons suffering from any of the acute infectious fevers contract such compared with the number who coming into similar contact with persons suffering from tuberculosis contract it. A high degree of health affords a greater protection against tubercular disease than against the ordinary infective fevers.

Opinions vary as to the desirability of notification of pulmonary consumption being made *compulsory*. It is not necessary to enter into the pros and cons. For the Local Government Board says (I think rightly), "Notification of itself has no administrative value, and, unless it is "to be followed by effective measures for curative treatment of the patients and for prevention "of the spread of infection, the Board will not feel justified in approving of the compulsory "notification of cases of the disease." The following statement is also made by that Board:—"For the effective application of the Public Health Act to pulmonary phthisis, a system of noti- "fication is essential. In some localities a system of voluntary notification has been organized." About a year ago I suggested the trial of *voluntary* notification, leaving it in the hands of practitioners to notify such cases as appeared might with benefit be brought to the notice of the health officer. I need hardly say that the tactful use of such knowledge is essential. I urge the several Councils to give this suggestion careful consideration.

First and foremost of preventive measures is the maintenance of the highest degree of health possible. To this end Councils should put into force all the powers they are invested with having for their object the *improvement* of the public health. Individual effort in the same direction is requisite. Without it the action of a sanitary authority is rendered nugatory. Isolation, so requisite in most of the more dangerous acute infective fevers, is not necessary in cases of pulmonary phthisis. If a phthisical patient take means to destroy or disinfect his sputum his danger to the public is practically nil.

In thirty-nine cases disinfection of the patient's bedroom was carried out, by the Councils' officials.

Housing of the Working Classes Act.

Under this Act seven houses were condemned by me as unfit for habitation, viz.—three in the Skelton & Brotton district and two in each of the Guisborough Rural and Redcar Urban districts. Six of these have been repaired.

A type of house continually met with is that which, though structurally defective, is not sufficiently so to warrant condemnation under the Act. Served with notice to remedy the defects the owner too frequently does so in a very perfunctory manner with the result that in a few months it is necessary again to serve a notice. This type of property can only be maintained in anything like decent condition by continuous and repeated inspections. And it is no doubt the same class which has called forth the drastic recommendations of the Select Committee on the Housing of the Working Classes Acts Amendment Bill.

Factory and Workshop Act, 1901.

The following Table shows the number of Factories, Workshops, and Workplaces on the Registers:—

District.	Factories.	Workshops.	Workplaces.
Guisborough Rural ...	1	47	
Guisborough Urban ...	8	42	
Loftus Urban	6	40	
Redcar Urban	6	43	17
Saltburn Urban	6	29	
Skelton & Brotton Urban	1	49	
TOTALS ...	28	250	17=295

The Factories are :—

- | | |
|------------------------|---|
| Printing works—7. | Iron foundry—1. |
| Aerated-water works—5. | Cycle repairing works—1. |
| Gas works—3. | Brick and tile works—1. |
| Steel foundry—1. | Laundries—2. |
| Electrical station—1. | Saw-mills—2. |
| Building works—1. | Carpenters shops with mechanical power—3. |

Early in the year notices were sent to the occupiers of workshops in each district calling attention to Section 107 of the Act which requires that the names and addresses of "out-workers" be sent twice yearly to the district council. Forms for the purpose were enclosed with the notices. Only two of these forms, filled in, were returned :—in both the names, etc. of *in-workers* were by mistake entered.

By far the larger number of workshops are those termed "Domestic." A domestic workshop is defined in the Act as "a place which though used as a dwelling, is by reason of the work carried on there a workshop and in which the only persons employed are members of the same family dwelling there." Of course it does not follow that a "domestic" workshop always remains such. The employment of an apprentice or assistant, not a member of the family, converts it into an ordinary workshop in which case the regulations applicable to the latter are to be enforced.

Of the 295 workshops and factories on the Registers 259 were visited by me.

Under Section 133 of the Act I forwarded two notices to the Factory Inspector.

In consequence of communications received from the Factory Inspector the owner of a blacksmith's shop erected a closet for his workmen and a notice has been served upon the Manager of a works to provide closet accommodation for the employees.

Cowsheds and Dairies.

The following list shows the number of these on the Register in each of the districts and the number inspected by me during the year.

District.	No. on Register.	No. Inspected.
Guisborough Rural ...	41	33
Guisborough Urban ...	22	21
Loftus ,,, ...	24	20
Redcar ,,, ...	24	24
Skelton and Brotton Urban ...	23	21
Saltburn Urban ...	4	3
	138	122

Notes on the Conference on Infantile Mortality held on
June 13th and 14th at Westminster.

In the first Paper read the teaching of the care of infants to the elder girls in elementary schools was advocated. Some of the speakers contended that the girls were too young to give much heed to, or to profit by, such teaching. This objection has considerable force in it. Instruction however in the elements of personal hygiene both to boys and girls would be beneficial. Of course the teaching would require to be such as could be assimilated.

In the second Paper the value of women Inspectors or Visitors specially trained in the feeding and care of infants, was discussed. Their value cannot be estimated by statistics, even though these were obtainable. There appears to be little doubt that in some districts the work of women visitors is productive of good. Much depends upon the class of population ; more, very much more, upon the personnel of the visitor. Tact first and tact last is absolutely essential : such a "visitor" is born not made.

In a paper upon "The Public Supply of Pure or Specially prepared Milk for the Feeding of Infants" attention was drawn to the provision in some towns of Municipal Milk Depots,—the object being the supply of milk pure and free from contamination. At present however neither municipal nor district councils have any power to provide such depots out of the rates. There are some objections, perhaps not insurmountable, to the scheme. But even then the maintenance of the purity of the milk after it has left the depot has to be provided for. It is to be remembered too that the natural food of an infant is its mother's milk not that of the cow. The plan, adopted in Paris, of supplying mothers suckling infants with nourishing and milk producing food is worthy of imitation.

The author of a Paper on "Premature Birth in relation to Infantile Mortality" showed the necessity of the notification or registration of "Still-births." Statements were made indicating that "still-born" was by no means applicable in every instance of so-called still-birth.

"The Teaching of the Hygiene of the Expectant and Suckling Mother" was the title of a Paper read by the Health Officer of a London district. In that district "cards of advice" to mothers and those about to become so are distributed through various agencies. Speaking on this paper a Dundee doctor stated that the "Social Union of Dundee" had started a restaurant for nursing mothers, the only point insisted upon being that the mother must be "nursing" her infant. That condition fulfilled, the mother was provided with two nourishing meals a day at a cost of 1/6 per week.

Two papers dealing with Infant Life Insurance were read and discussed. The prevailing opinion appeared to be that such insurance did not appreciably affect the infantile mortality rate.

In a paper on the "The Chemistry of Infant Foods" the writer gave particulars of analyses made by him of a number of the various Foods for Infants so largely advertised. Many of these were found to contain starch in an unaltered condition rendering them unfit for infants. In the words of the writer of the paper these foods are comparatively expensive, and in unskilled hands demand a care which might be "better employed in adapting cows' milk."

The discussion following the reading of a paper on "Increase of the Powers of Local Authorities with regard to Milk Supply" indicated very plainly a concensus of opinion as to the need of such action as would result in improving the conditions under which milk is supplied. The writer suggested that the large towns should agree upon the voluntary registration of such dairies "as observed proper precautions" and to issue certificates which would form a guarantee of the character of the milk, and of the conditions under which it was produced and distributed. One speaker urged the municipilisation of the whole of the milk supply and moved a resolution thereon ;—this resolution was not carried.

Two papers dealing with the effect of parental alcoholism on infantile mortality were read. The writer of one quoted the statement made by a German Professor, based on statistics, that "where the father is a drinker the daughter loses the power of suckling her child ; moreover this "power is lost for coming generations.—It is coupled with other symptoms of degeneration, "especially with the absence of resisting power against diseases of all kinds, tuberculosis, nerve

"disease, and caries of the teeth." In the discussion on the second paper it was pointed out that investigations made with regard to the reproductive history of women drunkards in a large prison showed that of 125 children (born of 21 drunken mothers) 52·2 % were still-born : that of 138 children the offspring of 28 sober mothers 23·9 were still-born. The investigator avoided as far as possible the cases which were complicated by other degenerative factors.

The remaining papers read dealt with conditions which do not affect the districts in the Guisborough Union.

Broadly the causes of infantile mortality may be divided into two classes ;—the ante-natal, that is those which affect the child before it is born, through its parents, especially of course through the mother ;—the post-natal, those which affect the infant direct after its birth. Of the former the chief are premature birth, inanition, wasting, congenital defects. Convulsions is frequently named as a secondary cause of death : in so far as this cause is due to the unstable nerve condition of the infant so far is it ante-natal. Of the causes affecting the infant direct, infectious diseases may be left out of consideration as, apart from whooping cough, the death of an infant from such is a rare occurrence. Of post-natal causes the principal are diarrhoeal diseases, bronchitis, and pneumonia.

Examination of the death returns show that at least 50 per cent. of infantile mortality arises from ante-natal causes. The percentage from diarrhoeal diseases varies very much from year to year, the average may be taken as about 17. Lung diseases cause about 18 per cent ; whooping-cough from 3 to 4 ; tubercular diseases about 5. The factors in the remaining percentage are too varied to permit of useful classification.

It is to be borne in mind that many infants succumb to post-natal diseases owing to lack of stamina, the result of ante-natal conditions. On the other hand a death from inanition (usually ante-natal) may be post-natal :—the mother may have died in child-birth, the infant succumbing from lack of proper nourishment. It will be seen therefore that the placing a death in this or that category can only be done on broad lines.

Such action as is necessary to reduce the mortality due to ante-natal causes depends in the main upon the *individual*, this is manifest. Lack of knowledge as to the causation of disease and the tendency to attribute diseases, all and sundry, to the water supply or the drainage or to some condition (or lack of it) under the control of the District Council has fostered individual irresponsibility. Much as a Council may do it cannot replace individual action. A knowledge as to the extent to which the health of an individual is in his own hands is required. To accomplish this the elder children in elementary schools should be taught the rudiments of personal hygiene. Children who have passed school-age should be compelled to attend, so many hours per week, continuation classes in advanced personal and domestic hygiene.

I have said that in the main the removal of the ante-natal causes depend upon the individual. The duty of a Council is to assist in this work by helping the people to help themselves. And this is to be done by enforcing the provisions of the numerous Public Health Acts.

Passing to the post-natal causes of infantile mortality diarrhoeal diseases claim first attention. The majority of these result either from the use of unsuitable or of tainted food. To overcome the former instruction in the feeding of infants is required. The issue of cards giving short instructions on broad lines might be useful especially in the case of younger mothers : direct and practical advice by a tactful visitor would be better. Of tainted foods milk is that which requires most consideration. This is not only the most easily tainted food but is open to contamination through more numerous channels than any other. And it is of course that which forms the basis of artificial foods given in the place of mother's milk. So far as the contamination of milk before it reaches the consumer is concerned improvements in the conditions under which it is supplied and distributed are much needed. The following Resolution was passed at the Conference :—"That the Dairies, Milkshops, and Cowsheds Order is defective, and that any "amendment should extend the definition of disease as applied to animals, and should make the "provision of regulations by local authorities compulsory. That the scope of the regulations "should be extended to cover dirty milk, and should enable local authorities to prohibit the sale "of any milk which fails to comply with the conditions of purity agreed upon." If individual consumers would take the trouble to enquire into the conditions under which their milk is supplied and would insist upon these being the best possible much would be done to bring about the

needed improvements. If the public prefer that the work should be carried out by officials then they must be prepared to pay for it. When the position and condition of pantries is considered the tainting of milk *after* it has reached the consumer is not a matter of surprise. In a very large number of cases the pantry is a small off-shoot of the house, often damp-floored, damp-ceilinged, damp-walled, its window within a few feet of the closet or refuse receptacle. In the designing of a house the position of a larder should be of primary importance. Of matters reported to the Councils one of the most frequent is dampness of pantry. To prevent contamination of food Councils must insist upon pantries being maintained in proper structural condition; upon the surface of house yards being laid with impervious material; upon ashpits being maintained in the best sanitary condition possible to such abominations; the abolition of these where they are a distinct danger to health; and the speedy removal of all house refuse.

To summarise:—of the conditions which adversely affect the health of infants and increase the infantile mortality rate the larger proportion are not subject to the control of district Councils as at present empowered; they are such as can only be removed by the action of the individual. Of the remainder some depend for their removal principally upon the action of Councils but the larger part upon the combined action of Councils and individuals.

In considering what further legislation, or adoption of regulations under present enactments is required, it is to be remembered that every new Act or regulation produces a crop of both active and passive resisters. Moral suasion is better than legal. Unfortunately there is a class unaffected by moral suasion: these are the people which necessitate new laws.

Marked reduction in the infantile mortality rate can only be expected when individual responsibility is recognised and acted upon. To this end instruction of the young in the laws of health is urgently required.

The action necessary in the future to maintain and improve the public health is four-fold, —public (by Councils), legislative, personal, educational.

Public. This includes the fulfilling of all the duties laid upon Councils by the numerous public health Acts:—the removal of conditions prejudicial to health and the promotion of those conducive to it. Conditions may exist which though not giving rise to specific disease induce ill-defined ailments, such as are included under the head of “malaise.” These weaken the system and render it less resistant to specific or organic disease.

Legislative. Legislation in the following direction is desirable:—

Power to prohibit the erection of fixed refuse receptacles in connection with new buildings in Urban districts.

Power to insist that repairs to dwellings and their appurtenances shall be carried out in a specified manner.

Extended powers for effectively dealing with uncleanly rooms and houses.

Alteration of the Cowsheds and Dairies Order, replacing registration by yearly licence, with the addition of such powers as would lead to a pure milk supply.

Power to enable a Council to fix, within certain limits, the maximum number of occupants of any house built after a specified date.

Personal. The need of individual action and the extent to which a man’s health is in his own hands requires to be strongly impressed on the public. County Councils might advantageously institute a series of health lectures. Occasional sermons from the pulpits of the various churches on cleanliness, which is said to be next to godliness, would have a beneficial effect.

Educational. One of the greatest needs of the day in public health matters is the teaching of hygiene to young people. Much, very much, sickness and many deaths result from ignorance and indifference, indifference begotten of ignorance. These must be combatted if success is to follow the efforts made to lessen sickness and mortality. The public health service should be educational as well as administrative. If the suggestion that school management be placed in the hands of the district Council or a committee of that body were adopted the systematic teaching of hygiene would I think soon evolve.

TABLE showing the Birth and Death Rates in the several Districts.

	Guisbro' Rural.		Guisbro' Urban.		Loftus Urban.		Redcar Urban.		Saltburn Urban.		Skelton and Brotton Urban.		Totals and Means.
Population	7900		6000		7500		10,000		3500		13,500		48,400
Number of births	M. 96 F. 105 — 201	M. 90 F. 107 — 197	M. 137 F. 142 — 279	M. 106 F. 121 — 227	M. 23 F. 29 — 52	M. 231 F. 233 — 464	M. 683 F. 737 — 1420						
Birth Rate	25·44	32·83	37·20	22·70	14·85	34·37	29·83						
Number of deaths... ...	M. 75 F. 54 — 129	M. 60 F. 49 — 109	M. 76 F. 50 — 126	M. 56 F. 61 — 117	M. 16 F. 15 — 31	M. 107 F. 93 — 200	M. 390 F. 322 — 712						
Death Rate	16·32	18·16	16·80	11·70	8·85	14·81	14·70						
Proportion of Deaths in children under 1 year of age to each 1000 births ...	169·0	132·9	150·5	96·9	115·4	150·8	141·5						
Proportion of Deaths in children under 5 years of age to each 100 deaths.	34·1	31·1	49·2	31·6	22·5	45·0	38·3						
Infectious Diseases Death Rate	0·88	0·16	0·53	0·60	0·28	0·33	0·49						
Diarrhoeal Diseases Death Rate	1·13	1·00	1·46	0·80	0·28	0·66	0·86						

TABLE showing the number of Cases of Infectious Diseases notified during the year in each of the districts.

	Gisbro' Rural.	Gisbro' Urban.	Loftus Urban.	Redcar Urban.	Saltb'r'n Urban.	Skelton and Brotton Urban.	Total.
Scarlet Fever ...	43	26	22	42	13	34	180
Diphtheria	14	0	2	42	4	9	71
Enteric Fever ...	3	0	0	1	0	1	5
Erysipelas	4	22	6	5	0	8	45
TOTALS ...	64	48	30	90	17	52	301

Table showing the number of Deaths in the several districts
from the causes named.

CAUSES OF DEATH.	Guisbro' Rural.	Guisbro' Urban.	Loftus.	Redcar.	Saltburn.	Skelton and Brotton.	Totals.
Small pox							
Measles			2				2
Scarlet fever	8	1	1				5
Whooping cough	2		1	4		1	8
Diphtheria and membranous croup	2			2	1	4	9
Croup	2						2
Fever { Typhus							
Fever { Enteric							
Fever { Other continued ...							
Epidemic influenza ...							
Cholera							
Plague							
Diarrhoea	9	4	11	8	1	9	42
Enteritis		2	1				3
Puerperal fever							
Erysipelas			1				1
Other septic diseases ...	1	1				1	3
Phthisis	3	5	6	5	4	12	35
Other tubercular diseases ...	6	3	4	6	1	13	33
Cancer, malignant disease ...	7	3	4	4	1	7	26
Bronchitis	3	1	12	2	1	8	27
Pneumonia	10	8	9	13	5	16	59
Pleurisy							
Other diseases of Respiratory organs ...							
Alcoholism } ...	1	1	1	4			7
Cirrhosis of liver }							
Venereal diseases ...							
Premature birth ...	3	9	7	3	1	18	36
Diseases and accidents of parturition ..	3	2		2		2	9
Heart diseases	6	12	4	6		18	46
Accidents	1	3	9	1		5	19
Suicides		1	1	3		1	6
All other causes	67	53	52	54	18	90	334
All causes	129	109	126	117	31	200	712

Infantile Mortality during the Year 1906.

	CAUSE OF DEATH.	Gisbro' Rural.	Gisbro' Urban.	Loftus.	Redcar.	Saltburn	Skelton and Brotton.	Totals.
All Causes.	Certified	28	26	42	22	6	69	193
	Uncertified	6				2		8
i. Common Infectious Diseases.	Small-pox							
	Chicken-pox							
	Measles							
	Scarlet Fever							
	Diphtheria : Croup							
ii. Diarrhoeal Diseases.	Whooping Cough			1			1	2
	Diarrhoea, all forms	6	1	4	6	1	5	23
	Enteritis, Muco-enteritis, } Gastro-enteritis } ...		1	6			1	8
	Gastritis, Gastro intestinal Catarrh		1		1		5	7
iii. Wasting Diseases.	Premature Birth	3	9	7	4	1	18	37
	Congenital Defects		1	2		1	2	6
	Injury at Birth							
	Want of Breast-milk, Starvation ...							
iv. Tuberculous Diseases.	Atrophy, Debility, Marasmus ...	7	4	4	4	2	11	32
	Tuberculous Meningitis	1						1
	Tuberculous Peritonitis : Tabes Mesenterica }	1					6	7
	Other Tuberculous Diseases ...	2	1				1	4
v. Other Causes.	Erysipelas							
	Syphilis							
	Rickets	1	1	4				6
	Meningitis (<i>not Tuberculous</i>) ...							
	Convulsions	11	1	7	5		9	33
	Bronchitis		1	5	2		4	12
	Laryngitis	1						1
	Pneumonia		3	1		1	3	8
	Suffocation, overlying							
	Other causes	1	2	1			10	14
		34	26	42	22	6	71	201

Mortality Statistics.

The Mortality Tables show:—

- (1) That of the number of deaths in the several districts the percentage in children under five years of age varied between 22·5 and 49·2.
- (2) That the infantile mortality rate per 1000 births registered varied between 96·9 and 169·0.
- (3) That of the total number of deaths in all the districts 28 per cent. occurred in infants under 12 months of age.
- (4) That of this number (201)—75 resulted from wasting diseases; 38 from diarrhoeal diseases; 33 from convulsions; 20 from bronchitis and pneumonia; 12 from tubercular diseases; 2 from infectious disease (whooping-cough).
- (5) That of deaths among persons over 25 years of age, heart disease caused 43; bronchitis and pneumonia 39; cancer and other malignant disease 26.
- (6) That of the 59 deaths among persons between the ages of 5 and 25, 22 resulted from tuberculous and 4 from infectious diseases.
- (7) That of the 71 deaths in children between one and five, 16 were due to infectious diseases and 9 to tuberculosis.

**TO THE CHAIRMAN AND MEMBERS
OF THE
GUISBOROUGH RURAL DISTRICT COUNCIL.**

GENTLEMEN,

The births registered during the year numbered 201 (96 males, 105 females), birth rate 25·44 ;—the deaths 129 (75 males, 54 females), death rate 16·32. The death rate from infectious diseases was 0·88, that from diarrhoeal diseases 1·13.

The infantile mortality rate per 1000 births, 169, is high. An examination of the returns shows that so many of the deaths result from causes which are removable by the action of the individual rather than that of the Council as to render it difficult to advise the Council what steps should be taken by it to bring about the desired reduction. The issue of cards of instruction as to the rearing of infants is of doubtful utility. To be of use the instructions must be precise; precision entails lengthy details; lengthy details lead to the card being thrown aside. Cards bearing pithily stated rules for the maintenance of health generally and that of mothers and infants specially might be of use. Whatever individual members of the community may or may not do there still remains the duty of the Council to do all that lies in its power to improve the public health.

Under the Notification Act 64 cases of infectious diseases were reported, viz.:—43 of scarlet fever in 25 houses, 14 of diphtheria in 10 houses, 3 of enteric fever, 4 of erysipelas. The following Table shows the number of these in each of the parishes:—

Parish.	Scarlet fever.	Diphtheria.	Enteric fever.	Erysipelas.
Wilton	... 15			3
Marske	... 5	11	3	
Hutton	... 2	1		
Danby	... 2	2		
Newton	... 3			
Morton	... 2			
Kirkleatham	... 13		1	
Easington	... 1			

Under the Factory and Workshop Act 1901, 88 inspections were made of which number 38 were made by myself. Nothing was noted during these inspections necessitating action, legal or other.

Of the 41 cowsheds on the register I inspected 33. On the whole the larger cowsheds were found in good condition; it is as a rule the smaller which require the most frequent attention.

Nothing in connection with the slaughterhouses, all of which I inspected, was noted requiring comment.

To remedy the nuisance caused by the deposit of house refuse at the sides of the road at Ainthorpe and Danby End small receptacles were, at my suggestion, erected. A cesspool at Ainthorpe was also made to receive the sewage of a few cottages.

At Newton the sewer was diverted and nine inch glazed pipes substituted for ordinary field pipes.

On my recommendation arrangements were entered into for the systematic scavenging of the closet pits at Wiley Bridge cottages.

The stone conduit at the west side of High Street, Marske, was taken up. To replace this a sewer, consisting of 370 yards of nine inch glazed earthenware pipes with manholes and a flushing arrangement, was laid down. At the same place (Marske) pipes were laid down for the supply of water to the urinal, a cattle-drinking trough, and to a hydrant (for street watering).

At Commandale a nuisance was caused by the discharge of sewage from a few cottages on to a bank and thence into a stream. To remedy this a small cesspool was made.

An increase in the water supply at Castleton is required. A short time ago the size of the reservoir was increased. This however does not meet the need. Steps are being taken by the Council to obtain a further supply of water.

Under the Housing of the Working Classes Act I condemned two houses as unfit for habitation:—one has been repaired. In the other case the Clerk has been instructed to take legal proceedings to have the house closed.

The usual systematic inspections of the several parts of the district were made by me, in some of which I was accompanied by the Inspector. The following is a list of defects remedied during the year:—

House yards repaired	...	...	...	6
Closets and ashpits repaired	...	...	...	8
Pan-closets substituted for ordinary	...	...	...	2
Other defects remedied	...	...	...	17
Rooms disinfected by Council officials	...	...	...	31

I am, Gentlemen,

Yours obediently,

W. W. STAINTHORPE.

Saltburn,

January 14th, 1907.

TO THE CHAIRMAN AND MEMBERS
OF THE GUISBOROUGH URBAN DISTRICT COUNCIL.

GENTLEMEN,

The births registered during the year numbered 197 (90 males, 107 females), birth rate 32.83; the deaths (corrected) 109 (60 males, 49 females), death rate 18.16. The death rate from infectious diseases was 0.53, that from diarrhoeal diseases, 1.00.

The infantile mortality rate per 1000 births registered, 132.9, is slightly in excess of the average during the ten years 1896-1905, which was 130.3. Of the 26 deaths of infants under 12 months over half (14) resulted from wasting diseases (including premature birth). What can the Council do to lessen infantile mortality beyond exercising their powers and carrying out their duties under the various Health Acts? Much of this mortality depends upon conditions which are not under the direct control of the Council. It is needful therefore that the public be awakened to a sense of their duties and responsibilities as individuals. A series of simple health lectures would be useful. Something might be done by conferences between sick-nursing or similar agencies and a committee of the Council. A voluntary body might be formed to co-operate with the Council in promoting personal health.

Under the notification Act 26 cases of scarlet fever and 22 of erysipelas were reported. The district was entirely free from smallpox, enteric fever, diphteria, and puerperal fever. Three scarlet fever patients were removed to the Isolation cottage.

Under the Factory and Workshop Act 116 inspections were made of which 44 were by myself. In no instance was any condition found to exist necessitating the taking of any action, legal or other.

The whole of the cowsheds (21), and slaughterhouses (8) were inspected by me.

A night visit was paid to the two common lodginghouses in the town. In one it was found that the passage between the top of the stairs and the bedrooms was used as a sleeping place; notice to discontinue this was served on the occupier.

A report dealing with the placing of night-soil from closets on to front streets during the process of scavenging was laid before the Council by me. In consequence the Inspector was instructed to take such steps as would reduce the nuisance thus caused.

Forty-one new houses became occupied during the year; fourteen new houses are at present in course of construction.

Inspections of the district were made by me from time to time in some of which I was accompanied by the Inspector, Mr. Kilburn. The following is a list of defects remedied during the year:—

House yards repaired...	...	...	22.
Drains ,, ...	...	...	17.
Closets, etc. ,, ...	...	...	22.
Over-crowding abated	...	...	2.
Defective closet pans replaced by new	...	...	35.
Other defects remedied	...	...	27.
Rooms disinfected by Council's officials	...	...	19.

I am, Gentlemen,

Yours obediently,

W. W. STAINTHORPE.

Saltburn,

January 14th, 1907.

TO THE CHAIRMAN AND MEMBERS
OF THE LOFTUS URBAN DISTRICT COUNCIL.

GENTLEMEN,

The births registered during the year numbered 279 (137 males, 142 females), birth rate 37·20 :—the deaths 126 (76 males, 50 females), death rate 16·80. The very high birth rate leads me to believe that I may have underestimated the population of the district. The infectious diseases death rate was 0·53, that of diarrhoeal diseases 1·46. The infantile mortality rate, 150·5 per 1000 births, is in excess of the average for the ten years 1896-1905 which was 133·7. Eleven of the deaths of infants resulted from diarrhoeal diseases and fourteen from wasting diseases, including premature birth. There is no doubt whatever that lack of knowledge of the laws of health is the direct cause of a large proportion of the mortality among infants. What can the Council do to lessen this waste of infant life? Individuals must be awakened to a sense of their duties and responsibilities. The formation of a voluntary body having for its aim the promotion of personal hygiene would be useful. Such an association could confer and co-operate with the District Council. First-aid, Ambulance, Associations exist: why not Personal Hygiene or Health Associations? Such bodies would arouse interest in the subject and would I think be productive of much good.

Under the Notification Act 22 cases of scarlet fever, 2 of diphtheria, and 6 of erysipelas were reported. Of the 22 of scarlet fever, 12 (in 11 houses) occurred in Loftus proper, 8 (in 7 houses) at Liverton Mines, and one each at Carlin How and Old Liverton. The two cases of diphtheria occurred at East Loftus.

Under the Factory and Workshop Act 82 inspections were made 38 of which were by myself. In consequence of a communication from the Factory Inspector a notice was served on the manager of a works to provide sufficient closet accommodation for the workmen.

Of the 24 cowsheds on the register 20 were inspected by me. The slaughterhouses were inspected from time to time.

Ventilating shafts have been attached to the sewer at East Loftus.

Plans of the proposed extension of the Loftus sewer, so that it shall discharge direct into sea, have been prepared by the Surveyor, Mr. Tarbit, and forwarded to the Local Government Board.

Manholes and ventilating shafts have been erected in connection with the sewer at West Loftus.

I have made systematic inspections of the district from time to time, often in company with the Inspector.

The following is a list of defects remedied during the year :—

House yards repaired...	...	...	2.
Closets, ashpits, etc. repaired	...	...	28.
Drains	„	...	2.
Other defects remedied	...	...	9.
Rooms disinfected by Council's officials	...	...	28.

I am, Gentlemen,

Yours obediently,

W. W. STAINTHORPE.

Saltburn,

January 14th, 1907.

**TO THE CHAIRMAN AND MEMBERS
OF THE
REDCAR URBAN DISTRICT COUNCIL.**

GENTLEMEN,

The births registered during the year numbered 227 (106 males, 121 females), birth rate 22.70; the deaths 117 (56 males, 61 females), death rate 11.70. The infectious diseases death rate was 0.60, that of diarrhoeal diseases 0.80. The infantile mortality rate per 1000 births registered was 96.9—this compares favourably with the average rate during the ten years 1896—1905, 126.6.

Ninety cases of infectious diseases were reported under the Notification Act, viz.:—42 of scarlet fever, 42 of diphtheria, one of enteric fever, and five of erysipelas. Thirty-two of the 42 scarlet fever cases were removed to the Isolation Cottage. The number of diphtheria cases (42) is considerably in excess of that of any year since the adoption of the Notification Act, 1892. In fact the *total* number reported during the fourteen years 1892-1905 was less than that notified during the past year. Many of the cases appear to have been of a very mild type. This may have been one of the factors in the spread of the disease. On October 2nd, I reported as follows to the Council: “Yesterday afternoon I received a notification of a case of diphtheria. In the evening, about 5-15, I called at the house. At that time the patient, a boy 11 years of age, was playing with other children in the street. This is a contravention of Sect. 126 of the Public Health Act, 1875.” No action was taken thereon. As the hospital accommodation at present provided only permits of the isolation of cases of one and the same kind at any one time and as cases of scarlet fever were being treated therein none of those of diphtheria could be sent thereto. The rapid growth of the town and its position as a seaside resort render the provision of efficient hospital accommodation imperative.

The large and rapid increase in the size of the town is indicated by the number of new houses occupied during the year, 147. In addition 80 houses are in course of erection.

Under the Housing of the Working Classes Act two cottages were condemned by me as unfit for habitation; both were repaired and made habitable.

Under the Factory and Workshop Act, 1901, 88 inspections of factories, workshops, and workplaces, were made; of this number 61 were made by myself.

The several slaughterhouses were inspected by me from time to time. In March I reported to the Sanitary Committee, “an inspection of the slaughterhouses made last week shows it to be desirable that notices be issued to the effect that these premises be kept clear of all articles except the necessary tackle.” Such notices were issued by the Council.

The sanitary arrangements of the whole of the Hotels in the town were examined by me—some defects were found; informal notices to remedy these were served and complied with.

The great increase in the population of the district has aggravated the difficulty experienced in dealing with the refuse of the town. A method of disposing of this has been suggested and will be reported upon by the Surveyor and myself at an early date.

The whole of the cowsheds and dairies on the Register (22) were inspected by me. Nothing in connection with these was noted requiring comment.

Systematic inspections of the district have been made by me from time to time and reported upon to the Sanitary Committee at its monthly meetings. The defects remedied during the year are as follows:—

House yards repaired	...	...	...	5
Drains ,	...	...	...	109
Closets and ash pits repaired	...	...	...	41
Other defects remedied	...	...	...	22
Rooms disinfected	...	...	...	91

I am, Gentlemen,

Yours obediently,

W. W. STAINTHORPE.

Saltburn,

January 16th, 1907.

**TO THE CHAIRMAN AND MEMBERS
OF THE SALTBURN-BY-THE-SEA URBAN DISTRICT COUNCIL.**

GENTLEMEN,

The births registered during the year numbered 52 (23 males, 29 females), birth rate 14·85; the deaths 31 (16 males, 15 females), death rate 8·85. The infantile mortality rate was higher than usual being 115·4 per 1000 births registered. The average during the ten years 1896-1905 was 74·0. This great difference is more apparent than real; or rather I should say it may give a wrong impression. The total number of deaths of infants under 12 months of age was six, had the number been four the rate would have been 76·9. Thus it will be seen that even one death more or less makes a considerable difference in the rate. In small districts, especially those in which the birth rate is low, the infantile mortality rate, for purposes of comparison should be taken over a period of years. Of the six deaths among infants four were due to "wasting diseases" (under this head premature births are included), and one each to diarrhoea and pneumonia.

Of the 17 cases of infectious diseases reported under the Notification Act 13 were scarlet fever and 4 diphtheria. One of the latter ended fatally: the deceased, a person 71 years of age, had not been out of her room for some years; it is difficult to understand how she contracted the disease.

Of the 31 inspections made under the Factory and Workshop Act, 1901, I made 30, the Inspector of Nuisances 1.

Several complaints were made to me of the nuisance arising from the escape of fumes (of benzoline from a laundry) into water closets in Montrose Street. The Inspector reported that the drain from the laundry did not discharge into the sewer in the street named. I subsequently communicated with him pointing out that there was an indirect connection by which the benzoline gas passed into the Montrose St. sewer. At a Council meeting I pointed out that the escape of the gas into the closets indicated a defective condition of the drains between the closets and the sewer and advised that steps be taken to have these tested:—nothing has been done in the matter; the nuisance referred to still continues.

Nothing in connection with the slaughterhouses and cowsheds was noted calling for remark.

The following is a list of defects remedied during the year:—

House yards repaired...	...	...	12.
Closets, ash pits, etc. repaired	...	...	61.
Drains	„	...	8.
Other defects remedied	...	...	25.
Rooms disinfected	...	...	17.

I am, Gentlemen,

Yours obediently,

W. W. STAINTHORPE.

Saltburn,

January 18th, 1907.

TO THE CHAIRMAN AND MEMBERS
OF THE SKELTON AND BROTTON URBAN DISTRICT COUNCIL.

GENTLEMEN,

The births registered during the year numbered 464 (231 males, 233 females), birth rate 34.37; the deaths 200 (107 males, 93 females), death rate 14.81. The infectious diseases death rate was 0.33, that of diarrhoeal diseases 0.66. The infantile mortality rate, 150.8, is slightly in excess of the average for the ten years 1896-1905. Of the 71 deaths among infants under 12 months of age, 11 were due to diarrhoeal diseases, 26 to wasting diseases (including premature birth) 7 to tuberculous diseases, 9 to convulsions, 7 to bronchitis and pneumonia. There will be no appreciable reduction in the infantile mortality rate until the public realises first the necessity of such reduction and second that the action required to bring this about is that of the individual. The power of public bodies is limited; nor can the action of Councils replace that of individuals. The utility of the distribution of cards of instructions as to the feeding and rearing of infants is doubtful. It is to be remembered that the natural food of an infant is its mother's milk. If for any reason the mother be unable to feed her child advice as to what should be substituted is better left in the hands of the medical attendant. Cards of pithily written rules as to the maintenance of health generally and of infants especially might be useful. The formation of voluntary bodies, similar to First Aid Associations, having for their object the promotion of personal hygiene would, by arousing interest, be of benefit.

The following Table shows the number of cases of infectious diseases notified in the several places named :—

Place.	Scarlet fever.	Diphtheria.	Enteric fever.	Erysipelas.
Charlton's Cottages ...	0	0	0	1
Carlin How ...	2	0	0	1
Boosbeck ...	0	0	0	0
Brotton ...	19	6	0	2
Lingdale ...	3	0	0	1
Moorsholm ...	0	1	0	0
New Skelton ...	1	0	0	0
North Skelton ...	1	0	0	1
Skelton ...	2	1	1	0
Skelton Green ...	3	0	0	2
Margrove Park ...	1	0	0	0
Detached houses ...	2	1	0	0
TOTALS ...	34	9	1	8

Under the Factory and Workshop Act, 1901, 74 inspections were made, 44 by myself, 30 by the Inspector of Nuisances. Under Section 133 of the Act I forwarded two notices to the Factory Inspector.

Of the 23 cowsheds on the Register 22 were inspected by me. One was found in a very defective condition; notice to carry out the necessary work was served and complied with.

The whole of the slaughterhouses were also inspected by me; nothing was noted calling for special remark.

Under the Housing of the Working Classes Act I condemned three houses as unfit for habitation; these were repaired.

During the year 16 new houses became occupied; 14 houses are in course of erection.

Systematic inspections of the district were made by me from time to time. Particulars of insanitary conditions found were laid before the Council at its monthly meetings either in my own reports or by entry in the Inspector's report book. The following list shows the number and nature of defects remedied during the year :—

House yards repaired...	...	...	46.
Drains "	...	...	9.
Closets and ash pits repaired	...	...	41.
Other defects remedied	...	...	86.
Rooms disinfected	...	...	62.

I am, Gentlemen,

Yours obediently,

W. W. STAINTHORPE.

Saltburn,

January 18th, 1907.

